ABSTRACT OF THE DISCLOSURE

[0046] An improved system and method for stirring suspended solids in a liquid media to enhance sample growth and improve sample detection results. The system and method employs a sample vessel holder which adapted to receive at least one sample vessel which contains the solids and liquid media and a stirrer, such as a ferrous metal filled stirrer, and maintain the sample vessel in a position such that the longitudinal axis of the sample vessel extends at an angle substantially less than 90 degrees with respect to the horizontal, such as within the range of about 15 degrees to about 25 degrees with respect to the horizontal. The system and method further employs a magnet driver, adapted to move a magnet, such as a rare earth magnet, proximate to an outer surface of the sample vessel to permit the magnet to impose a magnetic influence on the stirrer to move the stirrer in the sample vessel. Specifically, the magnet driver is adapted to move and, specifically, rotate the magnet such that the magnetic influence moves the stirrer along a side wall of the sample vessel. The magnet driver is further adapted to move the magnet away from said outer surface of the sample vessel to allow gravity to move the stirrer toward the bottom of the sample vessel. This technique therefore provides a more gentle and controlled stirring of the suspended solution.